

Custom Technology Transfer for Managing Power Quality

An offering of EPRICSG, Inc.



EPRI PEAC Corp. can provide customized power quality products, services, and support.

Power quality concerns are as diverse as the wide range of consumer and industrial electric equipment used across the country every day. With every increase in automation, whether of an industrial process or the family VCR, power quality and system compatibility issues can come into play.

Because your customers call on you with very particular problems related to power quality, EPRI PEAC Corporation is offering services that you design to fit your needs and those of your customers. The project you develop can address a particular power quality problem within your own company or within your customer's facility. Unlike collaborative projects involving several energy service providers, this one results in solutions that belong to you—proprietary solutions that can give you an edge in the deregulated energy services market.

EPRI PEAC Corp. offers a wide range of products and services, including equipment that can test the effects of voltage sags on industrial processes and can monitor power quality over a long period of time, to name just two examples. The *Custom Technology Transfer for Managing Power Quality* project allows you to leverage resources from an EPRI matching fund, while drawing on the products, services, and expertise available at EPRI PEAC Corp. to address virtually any power quality issue.

Finds Solutions for Power Quality Problems of All Kinds

SUMMARY This project will give you the opportunity to take on challenges related to power quality and system compatibility that are not already being investigated in other projects. Examples of some of the projects undertaken by other energy service providers include the following:


- A utility had a major, nationwide insurance firm as a customer. The firm reported a large number of claims from people who said their consumer electronics equipment—televisions, VCRs, etc.—were damaged by power surges. By drawing on EPRI's expertise and products, the utility was able to work with the insurance company to determine what could be done to make the household appliances less sensitive.
- One utility wanted to develop a power quality service center in its territory to handle the wide range of power quality issues it was encountering. EPRI provided services to help get the center started.
- A utility with a large office complex as a customer said the complex was plagued with personal computer (PC) problems. Working with EPRI, the utility and the complex owners were able to determine that the PCs were crashing because of how they interacted with one another. There were so many computers in the buildings that they were creating harmonics—power disturbances that propagated back through the power line. EPRI's recommended solution was to install power quality-enhanced power supplies in the computers. This led to a major collaborative project at EPRI PEAC Corp., in which researchers characterized the power quality performance of PC power supplies. The results of that project ultimately resulted in the adoption of a new, more rigorous standard for computer power supplies.

DELIVERABLES Depending on their scope, projects may include site visits, consultation, on-site testing, model testing, equipment mockup in the EPRI Power Quality Test Facility to simulate and test power quality fluctuations on a particular process, Power Quality Hotline Support and many other services and products deemed valuable to the solution of a particular power quality problem.

RETURN ON INVESTMENT This project will allow you to improve the value and usability of the power you deliver to your customers. It will provide you with a better understanding of how power quality affects your customers, and how detrimental impacts can be minimized. Because these projects are undertaken individually, the project design will be customized to your needs and results will be the property of your company. By embarking on a project specifically designed to benefit your customers, you will bring your customer into compatibility with the electric power system and help increase their satisfaction with the energy product you deliver.

CONTACT INFORMATION For more information, contact the EPRI Customer Assistance Center at 800-313-3774 or *askepri@epri.com*.

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